

Notice of Allowability

Application No.

09/664,403

Examiner

JAGDISH PATEL

Applicant(s)

CORNELL, ROSS H.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 7/16/07.
2. ☒ The allowed claim(s) is/are 71-73, 75-78 and 89-100.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

1. This communication is in response to amendment filed

Response to Amendment

2. Claims 71-73, 75-78, and 89-100 are pending and have been allowed.

Allowable Subject Matter

3. Claims 71-73, 75-78, and 89-100 are allowed.

4. The following is an examiner's statement of reasons for allowance:

The allowed claims pertain to a process for creating investment securities from pools of residential mortgages. More particularly, the present invention relates to a data processing system and method that (i) analyzes the risk elements of interest-rate derivatives and mortgage pools, (ii) structures floating-rate securities from interest-rate derivative and mortgage pool components and (iii) administers the resulting securities.

The following prior art is deemed closest prior art of record relevant to the allowed claims.

Frankel (US Pat. 6070151) teaches *Frankel* teaches a system implementing a method of restructuring mortgage-backed assets (the "underlying securities" or "collateral") to create new mortgage-backed securities (the "structured securities"). (Abstract, col. 5, line 53 -col. 6, line 9). *Frankel's* system measures the present value of the underlying securities' interest and principal cash flows under varying circumstances and uses user-provided input to allocate the cash flows to the structured securities. (Col. 3, line 65 - col. 4, line 12). *Frankel* teaches that the new structured securities (REMICs) are created with two tiers of underlying mortgage-related securities. (Col. 4, lines 27-48). The first tier consists of variable-rate underlying securities and the second tier consists of two interest-only securities (each an "IO") and two principal-only securities (each a "PO"), or combinations of these IOs and POs, backed by the variable-rate, first-tier securities. (Col. 5, line 64 -

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col. 10, line 32). Assuming that the variable-rate, first-tier securities accrue interest at different levels of an index, the *Frankel* system allocates the principal interest-only securities (each an "IO") and two principal-only securities (each a "PO"), or combinations of these IOs and POs, backed by the variable-rate, first-tier securities. (Col. 5, line 64 - col. 10, line 32).

Assuming that the variable-rate, first-tier securities accrue interest at different levels of an index, the *Frankel* system allocates the principal and interest of the variable-rate, first-tier, collateral securities among the interest-only and principal-only second-tier, structured securities so as to maximize the present value of these cash flows. (Col. 3, line 54 - col. 4, line 16).

Frankel teaches that the collateral for the new structured security must be limited to mortgages and mortgage-backed securities ("MBS") that qualify as REMIC assets and describes formulae qualifying the structured securities as REMIC regular interests. (Abstract, col. 2, lines 16-18; col. 6, lines 3-9; col. 10, line 33 - col. 17, line 23).

Accordingly, the aggregate cash flow of the collateral must be identical to that of the structured securities. (Col. 2, lines 1-9; col. 16, lines 58-65; Fig. 7).

Frankel does not teach or suggest a plan to overcome an artificial leverage limitation imposed by mortgage security regulatory structuring constraints because Frankel's securities comply with, rather than overcome, these constraints. Frankel does not address overcoming the rules or regulations for REMICs that affect leverage, such as the limitation that the REMIC securities be funded entirely with cash flows from qualified REMIC assets and the limitation that the interest formulae of REMIC securities be restricted to certain authorized rates. Frankel's securities are funded entirely with cash flows from qualified REMIC assets and the interest rates on the Frankel securities are restricted to interest rates authorized by the REMIC regulations.

Further, Frankel does not teach or suggest administering the securities issued under a plan according to the instant claims because Frankel's securities do not conform to any plan to overcome an artificial leverage limitation imposed by mortgage security regulatory structuring constraints; for example, by administering combined cash flows from interest-rate derivative components with the cash flows of mortgage pool components (such as variable-rate REMIC securities) placed in a grantor trust.

Claims 71-78 and 89 are allowed because the closet prior art of record fails to teach or render obvious to one of ordinary skill in the art at the time of the

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invention a method for structuring a series of securities, including a floating-rate security and an inverse floating-rate security that is backed by a mortgage pool having a total net cash flow which comprises at least the following features:

paying to a holder of the floating-rate security, a first portion of interest cash flow supplied by the mortgage pool a minus the third portion of interest cash flow, if the value of the interest rate index is below the threshold;

paying to the holder of the floating-rate security, the first portion of interest cash flow supplied by the mortgage pool plus the variable cash flow from the interest-rate derivative, if the value of the interest rate index is not below the threshold; and

paying to a holder of the inverse floating-rate security, the second portion of interest cash flow supplied by the mortgage pool.

wherein the first portion, the second portion, the third portion of the interest cash flows and the variable cash flows are supplied by a mortgage pool and dependent upon a value of an interest rate index.

Claims 89-92 are allowed because the closet prior art of record fails to teach or render obvious to one of ordinary skill in the art at the time of the invention a process performed by the data processing system for issuing the set of the structured securities wherein the set of the structured securities includes cash flows from the selected mortgage pool components and interest-rate derivative components, and the received cash flows in combination are sufficient to pay the interest obligations under a plurality of identified prepayment scenarios.

Claims 93-96 are allowed because the closet prior art of record fails to teach or render obvious to one of ordinary skill in the art at the time of the invention a method which comprises at least the following process:

determining whether the range of potential cash flows from the plurality of mortgages in combination with the range of potential cash flows from the interest-rate derivative are sufficient to pay the interest obligations of the proposed structured securities; and

if the cash flows are sufficient, creating a set of structured securities corresponding to the proposed structured securities, including at least a floating-rate class and a related inverse floating-rate class, wherein the set of

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structured securities is backed by cash flows from the plurality of mortgages and cash flows from the interest- rate derivative.

Claims 97-100 are allowed because the closet prior art of record fails to teach or render obvious to one of ordinary skill in the art at the time of the invention a data processing system for management of investment securities are partially backed by a mortgage pool which comprises at least the following process:

causing structured securities corresponding to the proposed structured securities to be issued if validating the proposed securities confirms that the cash flows from the interest- rate derivative and the mortgage pool are sufficient.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAGDISH PATEL whose telephone number is (571) 272-6748. The examiner can normally be reached on 800AM-630PM Mon-Tue and Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **KRAMER JAMES A** can be reached on **(571)272-6783**. The fax phone number for the organization where this application or proceeding is assigned is 517-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jagdish N. Patel

9/27/07